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a, Female moth (or adult) with wings spread; b, male moth with wings in natural position; c, eggs; d, larva; e, pupa (or transformation stage) in its cell in the soil; f, larva feeding on tomato fruit, showing typical injury. (a, b, and f about two-thirds natural size; c about seven times natural size; e about one and one-third times natural size.)

(See other side for life history and control)

TOMATO FRUITWORM

(Heliothis armigera (Hbn.))

Life History

The tomato fruitworm, or corn earworm, occurs over the entire United States and feeds on several crops, including tomatoes, cotton, and corn. In the Southern States and in California it is a serious pest of tomatoes every year. In the extreme South moths may emerge as early as January from their pupal cells, although most of them appear later in the spring. Shortly after the female moth emerges she begins to lay her eggs, which are somewhat smaller than the head of a common pin. She lays them singly on the leaves of the plant. As the larvae hatch they crawl over the leaves, feeding sparingly. They eventually find their way to the fruits, into which they cut holes or burrow, usually at the stem end. A worm may feed until full grown upon a single tomato, or it may move from one tomato to another, injuring several before it completes its growth. The full-grown worm leaves the fruit and enters the soil, where it transforms into the pupal or resting stage. There may be two or more broods a season.

Control

A satisfactory remedy for this pest is a 10-percent DDT dust. In localities where the tomato russet mite is a pest the dust should also contain at least 25 percent of sulfur. Where the tomato russet mite is not a pest, corn meal containing 10 percent of cryolite has also given satisfactory control.

Best results will be obtained by making three applications—the first when the plants are about 1 to 2 feet across and are beginning to set fruit, and the second and third applications after intervals of 14 days. The DDT dust should be applied at 30 pounds per acre, and the corn-meal mixture at 60 pounds per acre per application. The entire foliage should be covered, especially the growing tips and outer leaves of the plants. The dust should be applied with hand or power dusters. The corn-meal mixture may be scattered by hand.

CAUTION.—DDT and cryolite are poisons. Their use on the tomato crop may leave an undesirable residue on the fruit, which should be removed by washing or wiping before the fruit is marketed or eaten.

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